

Remarks

This Amendment is being made in response to the Notice to Comply dated March 26, 2007. Applicants respectfully submit that no new matter has been introduced.

The Commissioner is hereby authorized to charge any fees which may be required to Deposit Account No. 19-0065.

Respectfully submitted,



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DRP/kmm

Attachment: copy of Notice to Comply dated March 26, 2007



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,772	02/22/2002	Janet K. Yamamoto	UF-267XC1	1105
23557 7590 03/26/2007 SALIWANCHIK LLOYD & SALIWANCHIK A PROFESSIONAL ASSOCIATION PO BOX 142950 GAINESVILLE, FL 32614-2950			EXAMINER PARKIN, JEFFREY S	
			ART UNIT	PAPER NUMBER
			1648	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		03/26/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Notice to Comply

Application No.  
10/080,772

Examiner  
Jeffrey S. Parkin

Applicant(s)  
Yamamoto, J. K., et al.

Art Unit  
1648

Paper No.  
03/19/2007

### NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☐ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☐ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☐ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☒ 7. Other: applicants are reminded that Sequences appearing in the specification and/or drawings (e.g., see Figures 2, 4, and 10) must be identified by a sequence identifier (SEQ ID NO.:) in accordance with 37 C.F.R. § 1.821(d). Sequence identifiers for sequences appearing in the drawings may appear in the Brief Description of the Drawings. Applicant must provide appropriate amendments to the specification and/or drawings inserting the required sequence identifiers. Extensive amendments may necessitate the submission of a substitute specification. If the requisite SEQ ID NOS.: are not present in the sequence listing, a substitute sequence listing will be required.

#### Applicant May Need to Provide:

- ☒ An substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An substitute paper copy of the "Sequence Listing", as well as an amendment directing its entry into the specification.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

- For Rules Interpretation, call (571) 272-0951
- For Patentin Software Program Help, call Patent EBC at 1-866-217-9197 between the hours of 6 a.m. and 12 midnight, Monday through Friday, EST.
- Send e-mail correspondence for Patentin Software Program Help @ [ebc@uspto.gov](mailto:ebc@uspto.gov).

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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
10/080,772	02/22/2002	Yamamoto, J. K., <i>et al.</i>	UF-267XC1

EXAMINER	
Jeffrey S. Parkin, Ph.D.	
ART UNIT	PAPER NUMBER
1648	03/19/2007

DATE MAILED:

**Please find below a communication from the EXAMINER in charge of this application**  
Commissioner of Patents

This application contains sequence disclosures that are encompassed by the definitions for nucleotide and/or amino acid sequences set forth in 37 C.F.R. § 1.821(a)(1) and (a)(2). However, this application fails to comply with the requirements of 37 C.F.R. § 1.821-1.825 for the reason(s) set forth below or on the attached Notice To Comply With Requirements For Patent Applications Containing Nucleotide Sequence And/Or Amino Acid Sequence Disclosures. Any questions regarding compliance with the sequence rules requirements specifically should be directed to the departments listed at the bottom of the Notice to Comply. Applicants are reminded that sequences appearing in the specification and/or **drawings** (e.g., see Figures 2, 4, and 10) must be identified by a sequence identifier (SEQ ID NO.:) in accordance with 37 C.F.R. § 1.821(d). Sequence identifiers for sequences appearing in the drawings may appear in the Brief Description of the Drawings. Applicant must provide appropriate amendments to the specification and/or drawings inserting the required sequence identifiers. Extensive amendments may necessitate the submission of a substitute specification. If the requisite SEQ ID NOS.: are not present in the sequence listing, a substitute sequence listing will be required.

Applicant is given ONE MONTH, or THIRTY DAYS, whichever is longer, from the mailing date of this letter within which to comply with the sequence

Serial No.: 10/080,772

Applicants: Haynes, B. F., et al.

rules, 37 C.F.R. § 1.821-1.825. Failure to comply with these requirements will result in **ABANDONMENT** of the application under 37 C.F.R. § 1.821(g). Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 C.F.R. § 1.136(a). In no case may an applicant extend the period for reply beyond the **SIX MONTH** statutory period. Direct the reply to the undersigned. Applicant is requested to return a copy of the attached Notice to Comply with the reply.

#### Correspondence

Any inquiry concerning this communication should be directed to Jeffrey S. Parkin, Ph.D.; whose telephone number is (571) 272-0908. The examiner can normally be reached Monday through Thursday from 10:30 AM to 9:00 PM. A message may be left on the examiner's voice mail service. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, Bruce R. Campell, Ph.D., can be reached at (571) 272-0974. Direct general status inquiries to the Technology Center 1600 receptionist at (571) 272-1600. Informal communications may be submitted to the Examiner's RightFAX account at (571) 273-0908.

Applicants are reminded that the United States Patent and Trademark Office (Office) requires most patent related correspondence to be: a) faxed to the Central FAX number (571-273-8300) (updated as of July 15, 2005), b) hand carried or delivered to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), c) mailed to the mailing address set forth in 37 C.F.R. § 1.1 (e.g., P.O. Box 1450, Alexandria, VA 22313-1450), or d) transmitted to the Office using the Office's Electronic Filing System. This notice replaces all prior Office notices specifying a specific fax number or hand carry address for certain patent related correspondence. For further information refer to the Updated Notice of Centralized Delivery and Facsimile Transmission Policy for Patent Related Correspondence, and Exceptions Thereto, 1292 Off. Gaz. Pat. Office 186 (March 29, 2005).

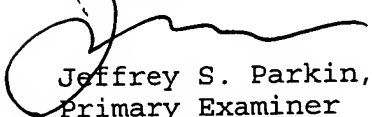
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Please direct all replies to the United States Patent and Trademark Office via one of the following: 1) Electronically submitted through EFS-Bio (<<http://www.uspto.gov/ebs/efs/downloads/documents.htm>>, EFS Submission User Manual - ePAVE); 2) Mailed to: Mail Stop Sequence, Commissioner for Patents, P.O. Box 22313-1450, Alexandria, VA 22313-1450; and 3) Hand Carry, Federal Express, United Parcel Service or other delivery service to: U.S. Patent and

Serial No.: 10/080,772  
Applicants: Haynes, B. F., et al.

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Respectfully,



Jeffrey S. Parkin, Ph.D.  
Primary Examiner  
Art Unit 1648

19 March, 2007

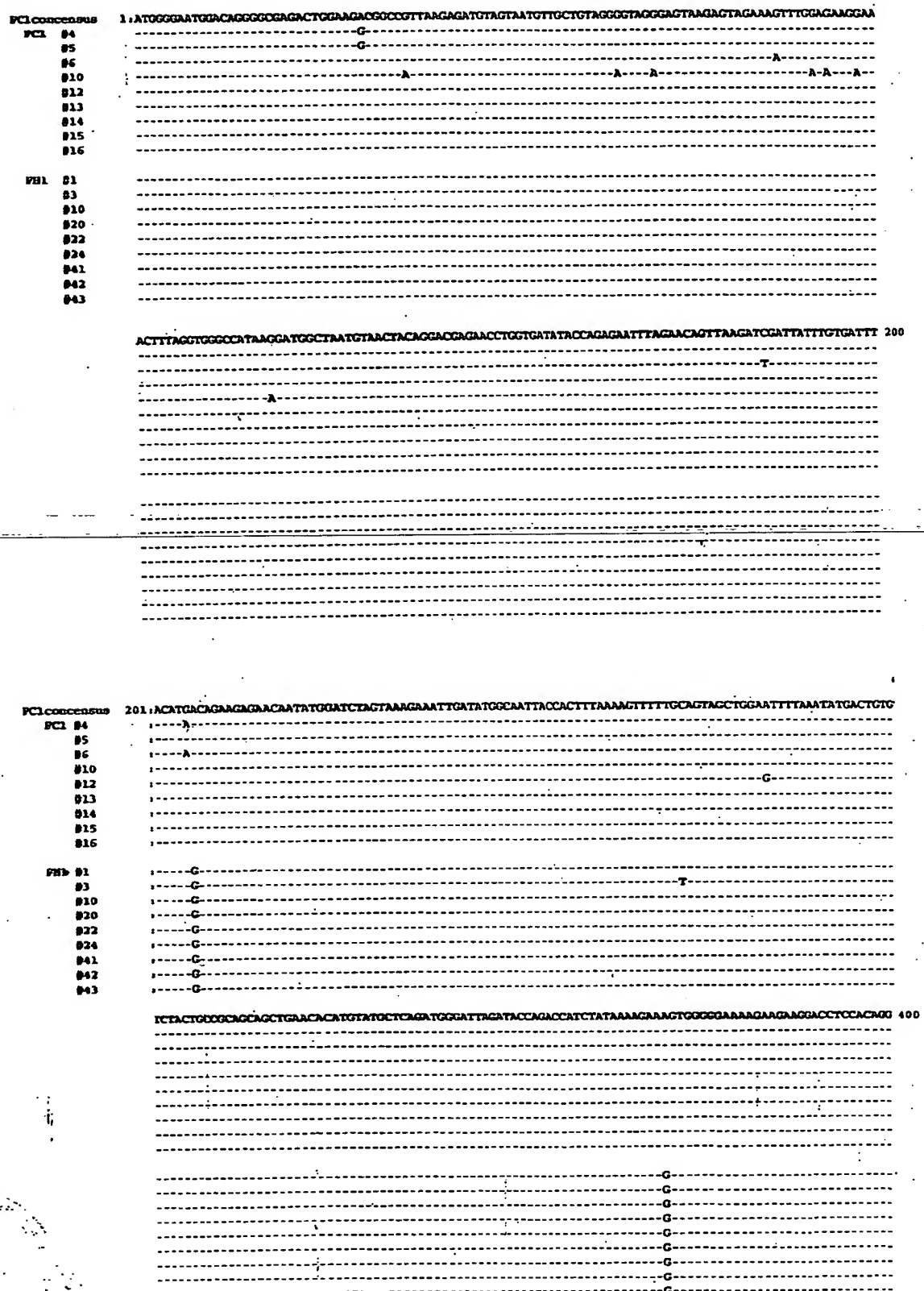


FIG. 2A

PC1 consensus 401: CTTATCTATTCAAAACAGTAATCGAGCACACAGTATGTAGCCCTTGACCCAAAAATGOTGTCCATTTTATGGA AAAACAGAGAGGGGCTAGCAGG  
PC1 04 :  
05 :  
06 :  
010 :  
012 :  
013 :  
014 :  
015 :  
016 :  
PH1 01 :  
03 :  
010 :  
020 :  
022 :  
024 :  
041 :  
042 :  
043 :  
TGAGGAGGTCCAACTGTGGTTCAAGCCCTTTCTGCTAATTTAACTTCAACTGATATGGCTACATTAATTATGTCTGGGCTGGCTGTGCAGCAGATAAA 600  
C  
A  
C

PC1 consensus 601: GAGATCTTAGATGAAACACTGAAACAGATGACAGCTGAGTATGATGCTACTCATCTCTGATGGGCTAGAACCCCTGCCCTATTTCAAGCCCTGGGAGAG  
PC1 04 :  
05 :  
06 :  
010 :  
012 :  
013 :  
014 :  
015 :  
016 :  
PH1 01 :  
03 :  
010 :  
020 :  
022 :  
024 :  
041 :  
042 :  
043 :  
TTATGGATAGGATTAAGTCAAGAACAAACAGGCGGAGCCAGATTTCACCCAGCTAGAAATGCAATGTAGAGCATGGTATCTTGAGGCACTAGCAAGTT 800  
C  
C  
C  
C

FIG. 2B



CAAGAGCAGAACACAGCTGAAGTAAGCTGTATTAAACAATCTTTGAGCATAGCCAATGCTAAGCCAGATTGTAAAGGCCAATGAGTCATCTTAAC 1000

AGTTCAAA CAAGAGGATCTAGACCAAGTGTTCATTGTAAAAAACAGGCCACTGGCCAAACAATGTAGAGAAAGCAAGAGATGTAACAACTGTGGA 1200

FIG. 2C

FC1 consensus 1201: AAACCTGGTCACTTAGCTGCTAATTGCTGCGCAAGAGGTAAAAAAACCCCGGGAACGGGAAGATGGGGCCACTGC  
 FC1 04 :-----A-----C-----  
 05 :-----  
 06 :-----A-----  
 010 :-----  
 012 :-----  
 013 :-----  
 014 :-----  
 015 :-----  
 016 :-----A-----  
 FH1 01 :-----  
 03 :-----  
 010 :-----  
 020 :-----  
 022 :-----  
 024 :-----  
 041 :-----  
 042 :-----  
 043 :-----  
 AGCCCCGGTAAACCAAGTGCAGCAATGGTGGCATCTGCACCTCCAAATGGAAGACAGGAATGTGTAGATTATTA 1353  
 :-----  
 :-----  
 :-----  
 :-----G-----  
 :-----  
 :-----  
 :-----  
 :-----  
 :-----C-----  
 :-----G-----  
 :-----  
 :-----  
 :-----C-----  
 :-----  
 :-----

FIG. 2D



FIG. 2E

FCI consensus	401	KPGHIAANCWQGGKTPGNGKGPAAAFVMOVQOMVPSAPPMEDEKLLDL	450
FC1 #4		-----P-----	
#5		-----	
#6	400	-----	449
#10		-----	
#12		-----	
#13		-----	
#14		-----	
#15		-----	
#16		-----	
FB1 #1		-----	
#3		-----	
#10		-----G-----	
#20		-----G-----	
#22		-----	
#24		-----	
#41		-----A-----	
#42		-----A-----	
#43		-----	

FIG. 2F



FIG. 4A

FIG. 4B

PH1 801: GGCAGCCATAAAAGCTAAATCTCCCCAGCAGTGCATTTGAAGCAAGGAGCTAAAGAGGATTATTCTCTATTTATAGATAGATTATTGCTCAAATAGAT  
 PC1 -----T-----  
 PETALUMA ---T-----G---T---T---G-A-GA-----G-A---A-C-----C---G---C-----  
 UKS ---C-----G---T---T---A-G-A-GA-----A-C-----C---G---C-----  
 PPR A-C-----G---T---T---G-A-GA-----G-A---A-C-----C---G---C-----  
 SENDAI-1 ---C-----G---T---T---G-A-GA---T---G---A-C-----C---G---C-----  
 BANGSTON ---C-----G---T---T---G-A-GA-----A---A-C-----C---G---C-----  
 AOMORI-1 ---G---C-----A---G---G---C---C---C-----C-----  
 AOMORI-2 ---G---C-----A---G---G---C---C---C-----C-----  
 SENDAI-2 ---G---C-----A---G---G---C---C---C-----C-----  
 TM2 ---G---C-----A---G---G---C---C---C-----C-----  
 YOKOHAMA ---G---C-----A---G---G---C---C---C-----C-----  
 SHIZUOKA ---C---G---T---T---GA---A---G-TG---G---C---G---C---G---G-----  
 FUKUOKA ---C---G---T---T---GA---A---G-TG---G---C---G---C---G---G-----

CAAGAGCCAGACACAGCTGAAGTAAAGCTGTATTTAAACCAATCTTTGAGCATAGCCATGCTAACCCAGATTGTAAAGGCCAATGAGTCATCTTAAAC 1000

---A-A-T-----T---T-A-----G-A-----T-----TG---C---A-----C-C---G---  
 ---A-A-T-----T---A-A-C-----G-A-A---G-T-----TG---A-C---A-----G---  
 ---A-A-T-----T---T-A-C-----G-A-A---T-----TG---A-C---A-----G---  
 ---A-A-T-----T---AT-A-----G-A-A---T-----TG---A---AA-----C---G---  
 ---A-A-T-----T---T-A-----G-A-A---T-T-----TG---A---A-----C-C---G---  
 ---A-A-T-----T---T-A-----G-A-A---T-----T-----A-----A-----  
 ---A-----A-----T-----T-----A-----A-----  
 ---A-----A-----T-----T-----A-----A-----  
 ---A-----A-----T-----T-----A-----A-----  
 ---A-T-----T-----G---A---T---C---C---G---C---T-G---  
 ---A-T-----T-----G---A---T---T---C---G-A---C---T-A-G---

PH1 1001: CAGAGAGTACTTTAGAGGAAAACTGAGAGCCTGTCAAGAGGTAGGATCCAGGATATAAAATCCAGTTGTTAGCAGAAGCTCTTACAGGGTTCCAGC  
 PC1 -----A-----CC---A---GT---T---AA---C-----AC-C---G-----AA---AGT  
 PETALUMA ---A---T-CC---A---GT---T---A---C-----AC-C---G-----AA---AGT  
 UKS ---A---CC---A---GT---T---A---C-----AC-C---G-----AA---AGT  
 PPR ---A---CC---A---GT---T---A---C-----AC-C---G-----AA---AGT  
 SENDAI-1 ---A---CC---A---GT---T---A---C-----AC-C---G-----AA---AGT  
 BANGSTON ---A---CC---A---GT---T---A---C-----AC-C---G-----AA---AGT  
 AOMORI-1 ---A-----G---C---A-----  
 AOMORI-2 ---A-----G---C---A-----  
 SENDAI-2 ---A-----G---C---A-----  
 TM2 ---A-----G---C---A-----  
 YOKOHAMA ---A-----G---C---A-----  
 SHIZUOKA ---A---CC---A---GT---G---C---AA---T---G-----AC-T---G-----AA---A---  
 FUKUOKA ---A---CC---A---G-GT---G---C---AA---T---G-----AC-T---G-----AA---A---

AGTTCAACCAAGAGATCTAGACCAACGTGTTCAATTTGTAACCAAGCCCACTGGCCAAACATGTAGAGAAGCAAGAGATGTAACTGTGA 1200

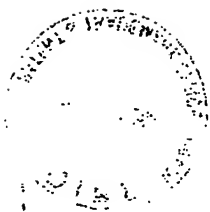
---G---T---A---G---GT---T---A---T---A---A-G-----TG---A-A---T---A---  
 ---G---T---A---AG---GT---T---G---T---A---A-G---G-----T-TG---A-A---T---A---  
 ---G---T---A---AG---GT---T---G---T---A---A-G---G-----T-TG---A-A---T---A---  
 ---A---T---A---AG---GT---T---A---T---A---A-G---G-----T-TG---A-A---T---A---  
 ---A---C-A---G-T-GT-----T-G-----A-----G-----T-----  
 ---C---A---C-A-A---GTA---T-----T---A---T-G-----T-TG---A-----T---A---

FIG. 4C

FH1 1201: AAACCTGGTCACTTAGCTGCTAATTGCTGGCAAGAGGTAAAAAACCCTGGGAAACGGGAAGATGGGGCAGCTGCAGCCCCGTAAACCAAGTGCAGC  
 FC1 -----  
 PETALUMA -----TG-----C-----T-----G-AA-G--G-ATT-----T-----GC-----G-----A-G-T-A-----  
 UKS -----T-----C-GA-----GG-T-----G-A-T-----T-----GC-----G-----A-----A-G-T-----  
 PPR -----T-----C-A-T-----G-T-----G-ATT-----T-----GC-----G-----A-G-T-----  
 SENDAI-1 -----G-----T-----C-A-T-----G-T-----G-ATT-----T-----GC-----G-----A-G-T-----  
 BANGSTON -----  
 AOMORI-1 -----G-----GG-----T-----A-G-----G-----A-----  
 AOMORI-2 -----  
 SENDAI-2 -----G-----C-T-G-----C-A-T-----G-A-C-G-----TG-TT-----G-----A-----  
 TMJ -----  
 YOKOHAMA -----  
 SHIZUOKA -----  
 FUKUOKA -----

AAATGGT\*\*\*GCCATCTGCACCTCCAATGGAAGACAGGAATTTAGATTATATA 1353  
 -----  
 --GCA--AAT-----G--G-AACT--GATTTA-A-  
 --GCCA--AAT-----G--G--ACT--GATTTA-A-  
 --CA--AAT-----G--A-AATT--GATTTA-A-A  
 --GCA--AATA-----T--A-G--G-AACT--GATTTA-A-  
 -----A--\*\*\*A-----G--G-AACT--AGATTTA-A-  
 --GCA--\*\*\*-----T-----G-----G-A-TTG--AGATTTA-A-

FIG. 4D





Consensus --GC-GCTGAA-A-ATGTA,-CTCA-ATGGGATTAGA-AC-AG-CCATCT---A--GA-----GG-GGAAA-G--G 385  
 Pet gag TGCTGCAGCTGAAAAATATGTATTCTCAAAATGGGATTAGACACTAGGCCATCTATGAAAGAAGCAGGTTGAAAAAGAGG 385  
 Bang TGCTGCAGCTGAAAAACATGTATACTCAGATGGGATTAGACACCAGGCCATCTACAAGAGAAGCAGGAGGAAAAAGAGG 385  
 JSY3 gag O TGCTGCAGCTGAAAAATATGTACACTCAGATGGGATTAGACACTAGACCATCTATGAGAGAGAAGCAGGAGGAAAAAGAGG 385  
 UK8 gag TGCTGCAGCTGAAAAATATGTATACTCAGATGGGATTAGACACTAGACCATCTACAAAGGAAGCTGGAGGAAAAAGAGG 385  
 Shizuoka TACTGCCGCTGAAAAATATGTATGCTCAGATGGGATTAGATACTAGACCATCTTTAAAGGAGGCAGGAGGAAAGGTAG 133  
 Aomor1 1 CACAGCAGCTGAAAAATATGTATGCTCAGATGGGATTAGACACCAGACCATCTATAAAAGAAAGTGGGGGAAAAAGAG 133  
 TM2 gag CACAGCAGCTGAAAAATATGTATGCTCAGATGGGATTAGACACCAGACCATCTGTAAAAAGAAAGTGGSGGAAAAAGAG 385  
 RT Forward ----- 0  
 RT Probe ----- 0  
 RT Reverse ----- 0  
 FC1 gag CGCAGCAGCTGAACACATGTATGCTCAGATGGGATTAGATACCAGACCATCTATAAAAGAAAGTGGGGGAAAAAGAG 385  
 A9=4 ----- 0  
 B4=5 ----- 0

Consensus A--G--CCTCCACAGGC-T-TCTAT-CAAACA--AAATGGAG-ACCA-A--A-GTAGC-CT-GA-CC-AAAAATGGT 462  
 Pet gag AAGGC-CCTCCACAGGCATATCCTATTCAAACAGTAAATGGAGTACCAATATGTAGCACTTGACCCCAAAAATGGT 461  
 Bang AAAGC-CCTCCACAGGCATATCCTATTCAAACAGTAAATGGAGCACCACAATATGTAGCACTTGACCCCAAAAATGGT 461  
 JSY3 gag O AAAGC-CCTCCACAGGCATATCCTATTCAAACAGCAAAATGGAGCACCACAATATGTAGCACTTGACCCCAAAAATGGT 461  
 UK8 gag AAGGC-CCTCCACAGGCATATCCTATTCAAACAGTAAATGGAGCACCACAATATGTAGCTCTTGACCCCAAAAATGGT 461  
 Shizuoka A-GGAGCCTCCACAGGCATATCCTATCCAAACAATAAATGGAGCACCACAATATGTAGCCCTGGATCCTAAAATGGT 209  
 Aomor1 1 AAGGA-CCTCCACAGGCTTATCCTATTCAAACAGTAAATGGAGCACCACAAGTATGTAGCCCTTGATCCAAAAATGGT 209  
 TM2 gag AAGGA-CCTCCACAGGCTTATCCTATTCAAACAGTAAATGGAGCACCACAAGTATGTAGCCCTTGATCCAAAAATGGT 461  
 RT Forward --AGC-CCTCCACAGGCATCTC-----ATTCAAACAGCAAAATGGAGCACCACAATATG----- 19  
 RT Probe ----- 31  
 RT Reverse -----TTGACCCCAAAAATGGT 16  
 FC1 gag AAGGA-CCTCCACAGGCTTATCCTATTCAAACAGTAAATGGAGCACCACAAGTATGTAGCCCTTGACCCCAAAAATGGT 461  
 A9=4 -TAGC-CCTCCACAGGCATATCCTATTCAAACAGTAAATGGAGTACCATAACACGTAGCACTTGACCCCAAAAATGGT 75  
 B4=5 --AGC-CCTCCACAGGCATATCCTATTCAAACAGTAAATGGAGTACCACAATATGTAGCGCTTGACCCCAAAAATGGT 74

FIG. 10A

Consensus GTC-A-TTT-ATGGA-AA-GGAAGAGA-GG--TAGGAGG-GA-GA-GT-CA--T-TGGTT-AC-GC-TT-TC-GC-A 539  
 Pet gag GTCCATTTTATGGAAGGCAAGAGAGAGGACTAGGAGGTGAGGAGTTCAACTATGTTTACTGCCTTCTCTGCAA 538  
 Bang GTCCATTTTATGGAAGGCAAGAGAGGACTAGGAGGTGAGGAGTTCAACTATGTTTACTGCCTTCTCTGCAA 538  
 JSY3 gag O GTCCATTTTATGGAAGGCAAGAGAGGATTAGGAGGTGAGGAGTTCAACTATGTTTACTGCCTTCTCTGCAA 538  
 UK8 gag GTCTATTTTCATGGAAAAGGCAAGAGAGAGGTTAGGAGGTGAAGAGTTCAACTATGTTTCAAGCCTTCTCTGCAA 538  
 Shizuoka GTCCATTTTATGGAAGGCAAGAGAGAGGATTAGGAGGAGAGGAGGTTCCAACTATGTTTACTGCATTTTCAGCTA 286  
 Aomori 1 GTCCATTTTATGGAAGGCAAGAGAGAGGAGGCTAGGAGGTGAGGAGGTTCCAACTGTTGTTTCAAGCCTTTCAGCTA 286  
 TM2 gag GTCCATTTTATGGAAGGCAAGAGAGAGGAGGCTAGGAGGTGAGGAGGTTCCAACTGTTGTTTCAAGCCTTTCAGCTA 538  
 RT Forward ----- 19  
 RT Probe ----- 31  
 RT Reverse GTCCA----- 21  
 FC1 GAG GTCCATTTTATGGAAGGCAAGAGAGAGGAGGCTAGGAGGTGAGGAGGTTCCAACTGTTGTTTCAAGCCTTTCAGCTA 538  
 A9=4 G----- 76  
 B4=5 GTCCAA----- 80

Consensus AT-TAAC--C-ACTGA-ATGSC-ACATTAAAT-ATG-C-GC-CC-GG-TG-GC-GCAG-TAA-GA-AT--T-GA-GAA 616  
 Pet gag ATTTAACACCTACTGACATGGCCACATTAAATAATGGCCGCACACAGGGTGGCTGCAGATAAAGAAATATTGGATGAA 615  
 Bang ATTTAACACCTACTGACATGGCCACATTAAATAATGGCCGCACACAGGGTGGCTGCAGATAAAGAAATATTGGANGAA 615  
 JSY3 gag O ATTTAACACCTACTGACATGGCCACATTAAATAATGGCCGCACACAGGGTGGCTGCAGATAAAGAAATATTGGATGAA 615  
 UK8 gag ATTTAACACCTACTGACATGGCCACATTAAATAATGGCCGCACACAGGGTGGCTGCAGATAAAGAAATATTGGATGAA 615  
 Shizuoka ATCTAACATCAACTGATATGGCTACATTAAATCATGTCTGCACCCAGGTTGTGCAGCAGATAAGGAGATCTTAGATGAA 363  
 Aomori 1 ATTTAACATCAACTGATATGGCTACATTAAATATGTCCGCACCTGGCTGTGCAGCAGATTAAAGAAATCTTAGATGAA 363  
 TM2 gag ATTTAACATCAACTGATATGGCTACATTAAATATGTCCGCACCTGGCTGTGCAGCAGATAAAGAAATCTTAGATGAA 615  
 RT Forward ----- 19  
 RT Probe ----- 31  
 RT Reverse ----- 21  
 FC1 GAG ATTTAACTTCAACTGATATGGCTACATTAAATATGTCTGGCCCTGGCTGTGCAGCAGATAAAGAGATCTTAGATGAA 615  
 A9=4 ----- 76  
 B4=5 ----- 80

FIG. 10B